

Effects of Dual Education at Different Levels

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President
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Georgetown University's Center on Education and the Workforce

By 2020, 65% of jobs nationwide will require post-secondary education

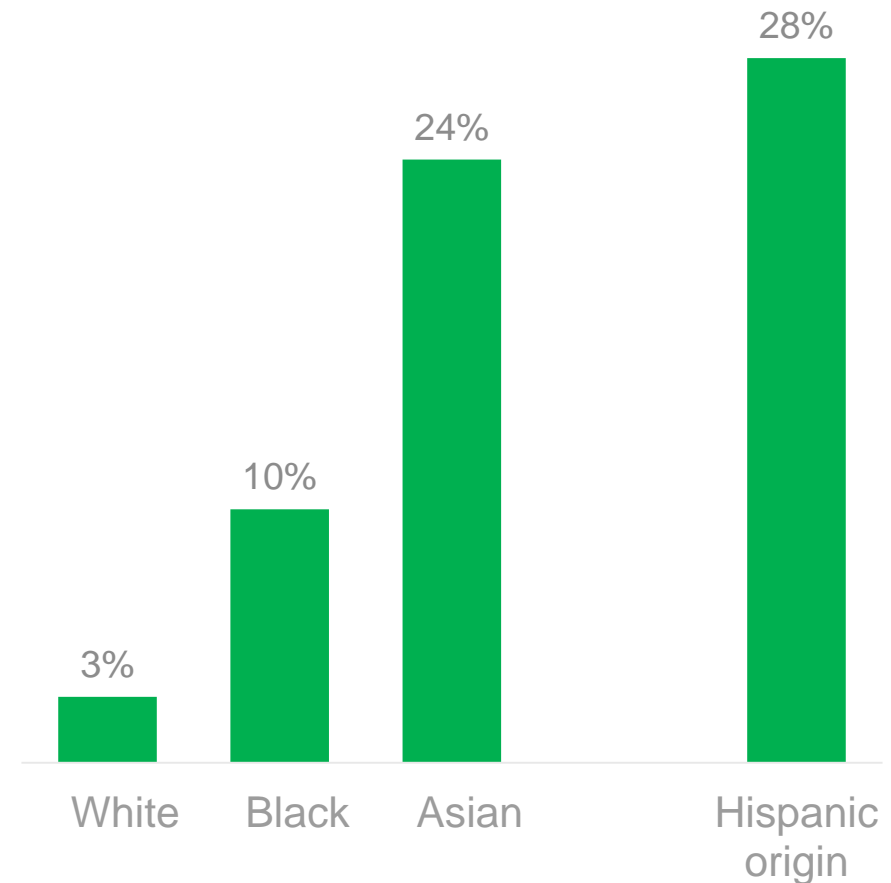
Level of post-secondary education required

- ✓ 33% some college/associate's degree
- ✓ 23% bachelor's degree
- ✓ 11% master's degree or better

Almost all states have current attainment below future required levels

Increase in Workforce 2012 to 2020

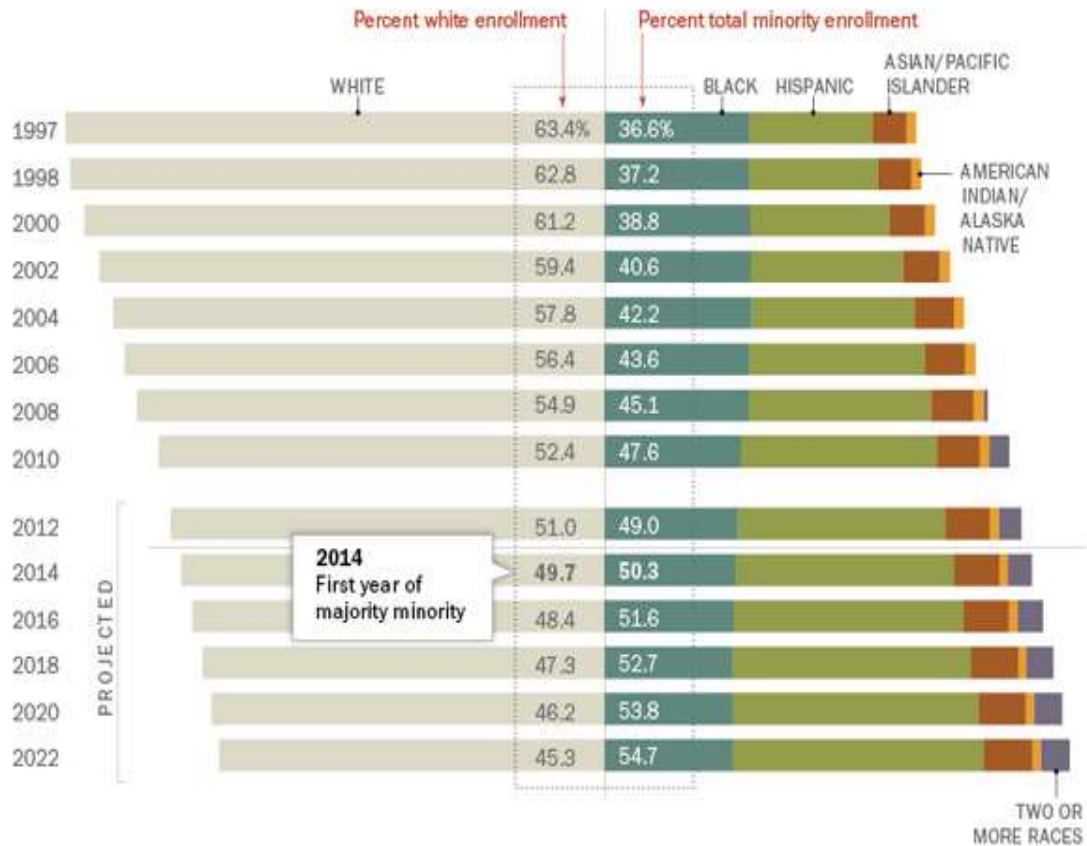
Race:	
White	3%
Black	10%
Asian	24%
Ethnicity:	
Hispanic origin	28%
Other than Hispanic origin	1%
White non-Hispanic	-2%



Source: http://www.bls.gov/emp/ep_table_303.htm

Public Schools in the United States Projected to Be Majority-Minority in 2014

Actual and projected share of enrollment in public elementary and secondary schools, by race/ethnicity

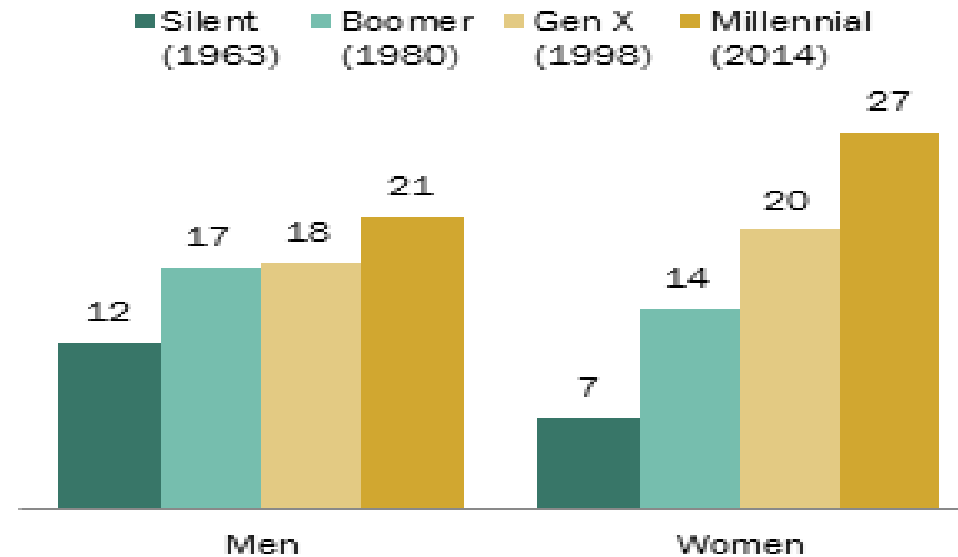


Note: Whites, blacks, Asian/Pacific Islander and American Indian/Alaska Native include only non-Hispanics. Hispanics are of any race. Prior to 2008, "two or more races" was not an available category. In 2008 and 2009, some students of both Asian origin and Hawaiian or Other Pacific Island origin were included in the two or more races category. In 2010 and 2011, all students of both Asian origin and Hawaiian or Other Pacific Islander origin were included in the two or more races category. In 2008, five states reported enrollment counts for students of two or more races. In 2009, 14 states reported enrollment counts for students of two or more races.

Source: National Center for Education Statistics, U.S. Department of Education.

Millennials On Track to be the Most Educated Generation to Date

% completing at least a bachelor's degree at ages 18-33, by gender

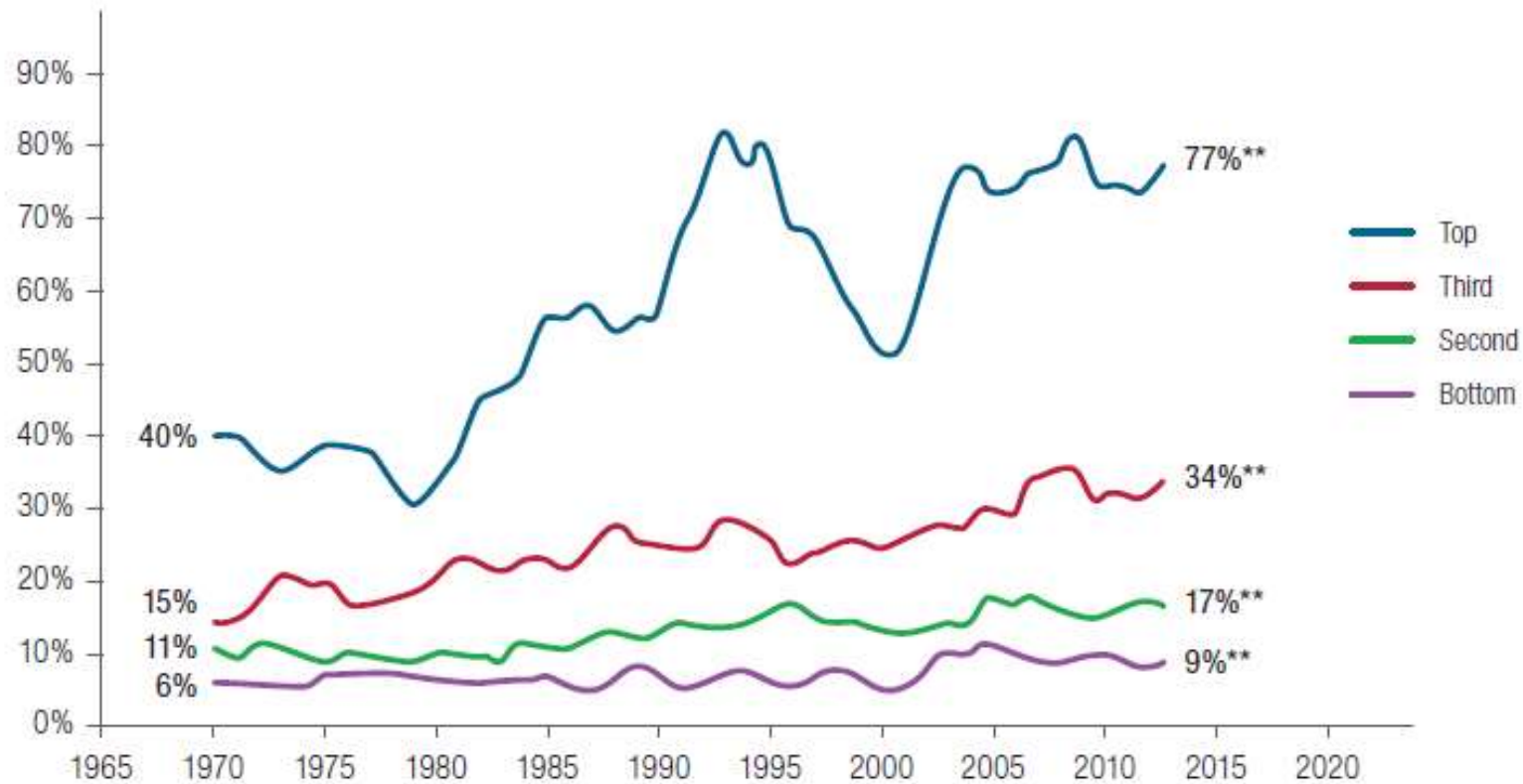


Note: The educational attainment question was changed in 1992. So for Boomers and Silents, this refers to those who completed at least four years of college. Educational attainment was not available for the 1963 Current Population Survey. The education of Silents was approximated using 18-33 year-olds from the 1962 Current Population Survey.

Source: Pew Research Center tabulations of the March Current Population Surveys (1963, 1980, 1998, and 2014) from the Integrated Public Use Microdata Series (IPUMS)

PEW RESEARCH CENTER

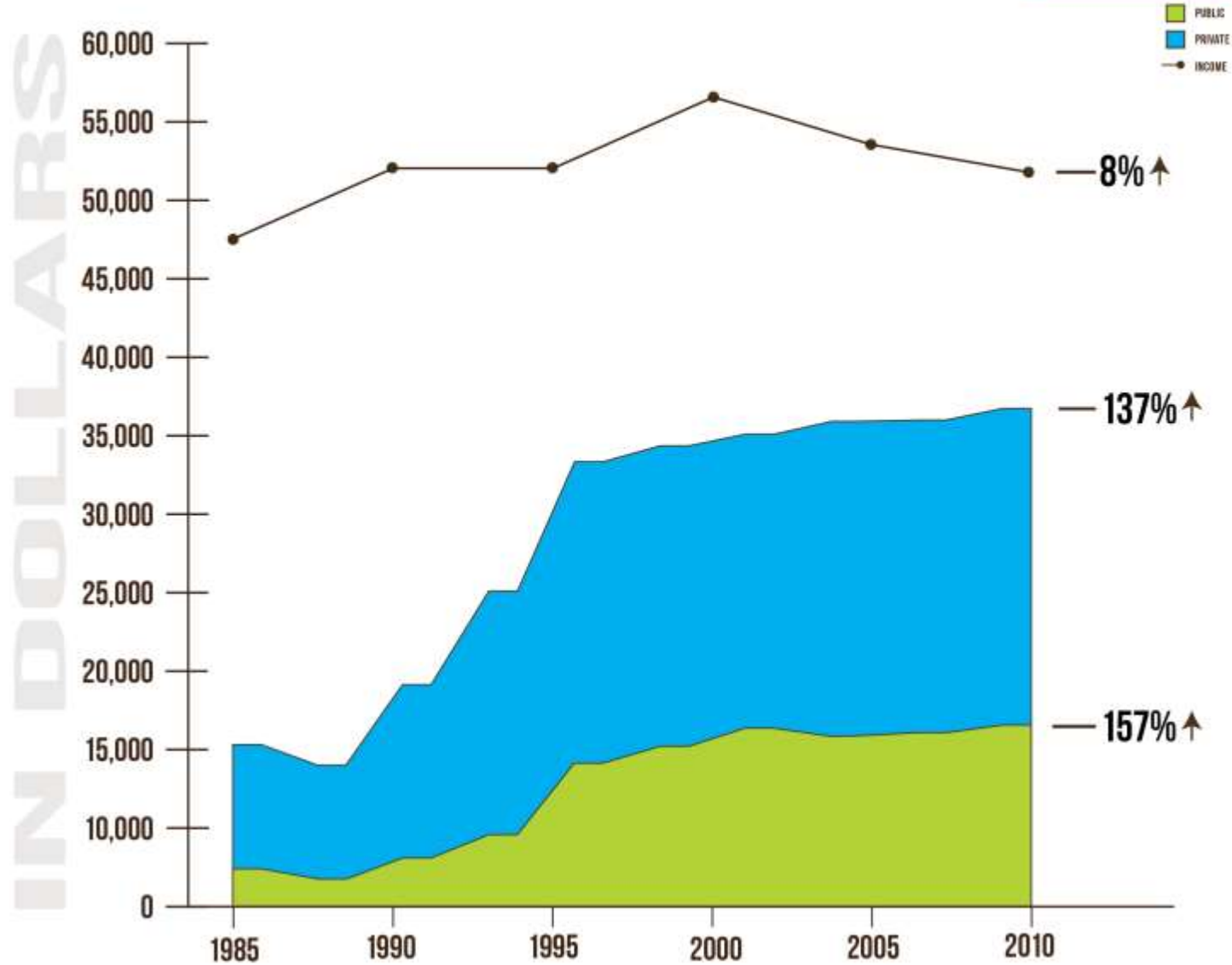
Pell Institute: Bachelor Degree Attainment by Age 24 for *Dependent* Family Members



Source: Pell Institute, 2015, Indicators of higher Education Equity in the United States, 45 Year Trend Report

CHANGE IN MEDIAN HOUSEHOLD INCOME COMPARED TO PUBLIC/PRIVATE COST

INCOME



Lifetime Earnings by Educational Attainment



Source: Georgetown University's Center on Education and the Workforce, 2011

ABOUT New Jersey City University

The mission at New Jersey City University is *to provide a diverse population with an excellent education.*

The University is committed to the improvement of the educational, intellectual, cultural, socioeconomic, and physical environment of the surrounding urban region and beyond.

Established in 1927 as a training school for teachers, today NJCU is among the most comprehensive universities in the state.

Jersey City Second Most Diverse City in Nation

Overall Rank* ⇅	City ⇅	Total Score ⇅	'Socioeconomic Diversity' Rank ⇅	'Cultural Diversity' Rank ⇅	'Economic Diversity' Rank ⇅	'Household Diversity' Rank ⇅	'Religious Diversity' Rank ⇅
1	Houston, TX	71.6	101	29	121	110	53
2	Jersey City, NJ	71.52	45	1	370	124	257
3	New York, NY	71.47	63	6	245	91	204



According to WalletHub; photo from <https://www.jerseycitynj.gov/community/diversity>

Dual Enrollment Studies

According to two 2005 reports from the U.S. Department of Education, 71 percent of U.S. high schools and 51 percent of U.S. postsecondary institutions permitted high school students to take college courses.

In total, 813,000 secondary school students took a college-credit course during the 12-month school year.

The Postsecondary Achievement of
Participants in Dual Enrollment,
National Research Center for Career and
Technical Education

October 2007

Dual Enrollment Studies

Two extensive reviews of the literature found almost no evidence that dual enrollment contributed to students' college access or academic success.

QUALITIES TO ACHIEVE

Authenticity of experience.

Integrated student supports.

Report from James Irvine
Foundation, October 2011

Dual Enrollment Study: Oregon

Over 90% of the students passed the course

Students were predominantly women, non-minority, and not low income

Dual Education in New Jersey

Apprenticeships

Summer research projects

College level courses taught in high school

Early college high schools

Internships for high school students

Prior Learning Assessments

Two areas to Address

- **What should be taught? What is the goal of the learning to be accomplished by the students? How might we learn to be more nimble and more integrated in our thinking so that we are helping to define what the future needs**
- **How might this best be accomplished and what are the stumbling blocks to this success?**

What is the goal of the learning?

Learning is a continuum from the primary and secondary sector to higher education and professional training and certification

This includes the importance of understanding what needs to be taught, what pedagogies are most effective for the student, and what experiences should students have to ensure maximum learning for long term effect.

What is the goal of the learning?

The pace of change of information, technology and ways of thinking has increased exponentially

Areas like financial technology, data science, bio-informatics are all relatively new and require more diverse thinking than before

Technical training has changed to include more complex use of technology and critical thinking skills

What is the goal of the learning?

Embedded in this is our rich diversity and humanness.

Diverse learning environments create new opportunities for learning. A diverse mix of cultures, ways of thinking and ways of defining values can result in a powerful learning experience

For students from the lower socio-economic groups, education can be a life changing experience for them and their families.

What is the goal of the learning? How does it affect dual education?

Dual education has long been an effective way to incorporate the goals of post-secondary education into the secondary experience.

Whether on a college campus, as in apprenticeship, at the local high school, or in an internship, post-secondary education can better connect and accelerate learning with secondary students through these methods.

What is the goal of the learning? How does it affect dual education?

Care must be taken to ensure that the curriculum at the secondary level and the post-secondary level are meeting the needs of the changing society.

In many ways we have moved from rote learning to more complex thinking - making conclusions from data and using multidisciplinary thinking.

The learning experiences in the secondary school and the post-secondary school need to reflect these changes.

How might this be accomplished?

Modes of teaching and learning should be smooth from high school to college to businesses

New modes of inquiry and teaching

Active learning

Problem based learning

Socratic methods

Flipped Classrooms

‘Guide on the side’ and not ‘sage on the stage’

How might this be accomplished?

Colleges that train teachers

Professional development for teachers

Doctoral granting institution – training for doctoral students